

Butterflies collected from the Eastern Cape Province

By L. P. HERSALEK

From the Eastern Cape the writer has recorded ninety-five species of butterflies. These species have come from varied habitats: pine and indigenous mountain forests of Hogsback, coastal forests of Van Stadens Pass; bush (thorn and cacti) of Uitenhage, the slopes of Hogsback, Witteklip hills (shrubs: protea species, *Leucospermum* sp., heather). Other areas investigated: Port Elizabeth and areas around Grahamstown (bush, Karroo veg.). One can simplify the above into three main habitats: (a) Forest (mainly indigenous); (b) Bush and (c) Mountain-hill. Each has its own characteristic species. Common species are those found in three habitats, rare or local species those found only in one type of habitat. Thus using the three habitats above the writer will describe butterflies collected during the past few years in the Eastern Cape Province.

(a) Forest (Coastal and mountain).

Charaxes varanes found commonly in forest clearings at Van Stadens, Hogsback, and even in bush localities (Grahamstown, Uitenhage). *Varanes* tends to fly low and congregates at sucking places (sap oozing from certain trees and shrubs). *C. xiphares* even more forest loving than *varanes*. I found it sparingly at Van Stadens Pass and Hogsback while a single female was seen in small tract of forest near Grahamstown. I found the female commonest of the sexes, and much easier to collect, as she tends to sail casually amongst the trees. Often in her aimless gliding she comes within reach of the net. Not so the male he flies rapidly and businesslike often high amongst the trees. I discovered banana bait was best at V.S.P. by which some beautiful male specimens of this blue and black charaxes were obtained. *C. ethalion* taken so far in forest at Th. Baines Nature Reserve (nr. G'town) found at sucking place (unlike *xiphares*) and being nearly uniform black. *Neptis marpessa* and *Eurytela hiarbas* are two black and white Nymphalids characteristic of this habitat. They delight in forest bushes in filtered sunlight at V.S.P. particularly. Of the four species of *Papilio* I have taken in the Eastern Cape, three are predominantly forest species. *P. dardanaus cenea*, *P. nireus lyaeus*, both occur commonly at the coastal forests of V.S.P. and also at Hogsback together at the latter habitat with *P. echerioides* a true inhabitant of the wetter mountain forests. The female of *P. dardanus cenea* is tailless (unlike male) and shows three forms at V.S.P.; normal female form *cenea*, f. *trophonius* (mimic of *D. chrysippus*) and f. *hippocoonides* which is black and white somewhat like *Hypolimnas misippus*. *Antiantartia hippomene* is a nymphalid, like a tailed English Red Admiral, that occurs in the mountain forests of Hogsback during April. *Belenois zochalia* the forest white and *Netheronia buqueti* with its characteristic green eyes and swift flight are among some of the Pierids taken at V.S.P. I have taken no real forest Lycaenids, but of the Satyrids *Meneris dendrophilus dendrophilus* is a true lover of the Hogsback mountain forests. Two other species I have found in most wooded areas are *Bicyclus safitza*, *Cassionympha cassius* (Rain forest brown). From the mountain forests of the Hogsback two Hesperids taken during April are: *Calleagris kobela* and *Celaenorrhinus mokeezi* the former occurs in plenty amongst grassy clearings on the forested slopes. Its large black

brown form is quite obvious. *Mokeezi* on the other hand keeps strictly to the damp cool forest interior. It tends to settle flat upon the upper surfaces of stray sunlit leaves and *mokeezis* yellow and brown wings blend in this condition of diffuse sunlight and shade. Another species that I have found which often settles on the undersurfaces of leaves in the forests near Uitenhage is *Tagiades flesus* being broad winged, the outer part of hindwing being grey-blue. *Eagris nottoana* also from the coastal forests is like a smaller version of *kobela*.

(b) *Bush.*

I shall consider this region as consisting of low shrubs and bushes (thorn, cactus, etc.) with few scattered trees (cabbage tree, acacia). This type of country is dry and offers little shade to the collector during the summer months. Most collecting was done around Uitenhage (20 miles from Port Elizabeth) and Grahamstown (70 m. North East of Uitenhage). Here in thorn and prickly pear belts of Uitenhage esp. are found a wealth of whites and skippers with a smattering of lycaenids (Hairstreaks). *Colotis eris* (Banded Gold Tip) is a very erratic Pierid. Weaving its way through the thorn bushes, *eris* defies the collectors net, the latter often suffering a series of rents from the ever present thorns. Three other Tips occur more commonly than *eris* in this area during December; *C. evenina* and *C. evagore antigone* have orange tips and are similar to the English Orange Tip. *C. antevippe* has intense scarlet tips in the male. *Pinacopteryx eriphia* known as the Zebra due to being all brown with white stripes and is a local inhabitant of typical bush country. Throughout the year one can usually find the following pierids: swift *Catops. florella*; *Belenois creona*; *B. aurota* and *Eronia cleodora*. Of the Hesperids *Tsitana uitenhaga* is a great lover of some bush areas around Uitenhage during November. In appearance it is dull brown with a white stripe on the underside and its flight similar to some of the satyrids. *Kedestes lepenula* a brown and yellow skipper that I have found widespread but difficult to take in numbers, as only a single specimen will be met with in the course of whole days collecting in the bush. *Eretis djaelaelae* occurs throughout the year and when fresh from the pupa the wings are a beautiful silky black/brown-purple colour, this in the course of active butterfly frolics is lost and fades to a dingy brown. *Gomalia elma* the Marbled elf, with a creamy pool on the hind wing, I have taken throughout the year and *elma* delights in settling on pink flowers in bush areas. *Borbo borbonica* the Olive Haired Swift I have found rare having taken only one specimen from Grahamstown during May.

The Swallow tails *P. demodecus* and *P. nireus lyaeus* occur commonly in bush areas. The latter is often attracted to moist places by rivers. Lycaenids include the bright tailed red and black *Axioceres harpax*, the brilliant lustrous blue hairstreak *Myrina ficedula*, the purple shot *Anthene definita* and golden brown *A. amarah* from Grahamstown. While around Uitenhage I have found the minute fluttering *Oraidium barberae* Africas smallest butterfly. *Leptomyrina hirundo* and *Lachnocnema bibulus* occur near succulents and fig trees respectively. Only one copper appears to be definite of this area, *Poecilmitis chrysaor*, this golden winged species will at once approach burst from a bush in a flash of burnished copper circling at speed and finally settling again

and covering its bright surfaces with the pale brown wing undersurfaces.

(c) *Mountain-hill.*

Most of the species described or listed here were recorded from the hilly grassy country around Rocklands (14 m. from Uitenhage) and the more mountain like Witteklip (25 m. W. of P.E.). True mountain country was investigated at Hogsback (up to 5,000 ft.). At least three *Acraeas* are found in this region; *A. rahira* the Marsh *Acraea* found during September along the Brak river at Rocklands. *Pardopsis punctatissima* and *A. anacreon* are more high elevation species. The former occurs on the shrubbed slopes of the south-westerly swept Witteklip range, while *anacreon* I have taken in April as high as 5,000 ft. near streams at Hogsback and at 5,500 ft. have found hundreds of larvae of the common *acraea* *A. neobule*. With the exception of the above *Acraeids* I have found no other families more characteristic of this habitat in my collecting than the *Satyrids* and *Lycaenids* (esp. coppers and blues). Of the *Satyrids* I shall mention the large (4 in.) *Aeroptes tulbaghia* the true Mountain Pride which occurs at Witteklip in August, flying swiftly and majestically at or near the summits of high ground. This yellow and brown pride of the *Satyridae* is then difficult to capture on the wing. But apart from the *Satyrids* the *Lycaenids* offer a more characteristic group. Of the blues one finds the beautiful large *Lepidochrysops* inhabiting the hill tops. *L. asteris* is brilliant blue, *L. ortygia* darker blue, and *L. methyma* is all brown. *Cupidopsis cissus* tends to be less common than the above and inhabits less elevated habitats.

What strikes my attention whenever I climb the Witteklip range near my home is the rapid flying copper, (Protea Scarlet) *Capys alphaeus*. This robust bright scarlet and jet black insect warily avoids the net as it swiftly takes to wing at the slightest disturbance but will usually return to its favourite perch; a dead protea twig or leaf. If one takes care one can stalk *alphaeus* with a degree of success. Coppers are like gems in these relatively barren hills, it is with delight when one falls amongst a colony of *Poecilmitis pyrois* shot with violet blue at the base of the wings. Not far from this colony at Witteklip I have found numbers of *Phasis wallengrenii* during December. Further yet among the same hills in a certain valley occur a local colony of *Poecilmitis palmus* flying nearly throughout the year by a small stream. *Palmus* resembles *chrysaor* on the upper surface but the under surface is quite different. Thus in conclusion I have made a list of all the butterflies recorded by myself in this Province. It by no means represents a total of all Eastern Cape Province butterflies but it does I think reflect a fair majority of them. In this paper I have tried to show the concentration of certain butterfly families in three main habitats occurring in this region, and to briefly present some species characteristic or inhabiting each of these habitats.

ABBREVIATIONS:

Van Stadens Pass	V.S.P.
Witteklip	Wit.
Grahamstown	G/town
Port Elizabeth	P.E.
Uitenhage	Uit.

PIERIDAE

<i>Colotis antevippe</i>	Uit. P.E.
<i>C. euipe</i>	Uit.
<i>C. evagore antigone</i>	Uit. G/town P.E.
<i>C. eris</i>	Uit. Wit.
<i>Colias electo</i>	Everywhere
<i>Eurema brigitta</i>	Wit. P.E.
<i>Eronia cleodora</i>	Uit. (Groendal Dam), V.S.P.
<i>Catopsilia florella</i>	Uit. V.S.P.
<i>Netheronia buquetii</i>	V.S.P.
<i>Dixeia doxo charina</i>	Despatch (Uit.), V.S.P.
<i>Belenois creona</i>	Uit.
<i>B. aurota</i>	Uit.
<i>B. gidica</i>	V.S.P. Uit.
<i>B. zochalia</i>	V.S.P. only
<i>Pinacopteryx eriphia</i>	Uit.
<i>Pontia helice</i>	Everywhere
<i>Mylothris chloris agathina</i>	V.S.P. Rocklands

PAPILIONIDAE

<i>Papilio demodecus</i>	Everywhere
<i>P. nireus lyaeus</i>	Uit. V.S.P. G/town
<i>P. dardanus cenea</i>	V.S.P. Uit. G/town Hogsback
<i>P. echerioides</i>	Hogsback only

LYCAENIDAE (blues)

<i>Azanus moriqua</i>	Uit. G./town
<i>A. jesus</i>	Uit. G/town
<i>A. ubaldus</i>	Uit.
<i>Tarucus thespis</i>	G/town Wit.
<i>Cacyreus palemon</i>	Wit.
<i>Cacyreus marshalli</i>	P.E. Uit. G/town
<i>Zizeeria knysna</i>	Everywhere
<i>Eicochrysops mahallokoaena</i>	Rocklands
<i>Actizera lucida</i>	Wit. Rocklands
<i>Oraidium barbarae</i>	Uit. (Despatch)
<i>Brephidium metophis</i>	Middelburg
<i>Anthene amarah</i>	G/town
<i>A. definita</i>	Uit. G/town
<i>A. livida</i>	Uit.
<i>Lepidochrysops methyma</i>	Wit. Rocklands, G/town
<i>L. asteris</i>	Wit. Rocklands, G/town
<i>L. ortygia</i>	Rocklands, Wit.
<i>Cupidopsis cissus</i>	Wit. only
<i>Lampides boeticus</i>	Everywhere
<i>Syntarucus telicanus</i>	Everywhere
(Coppers)	
<i>Poecilmitis chrysaor</i>	Uit. G/town
<i>P. palmus</i>	Wit. Rocklands
<i>P. pyroeis</i>	Wit. only
<i>Phasis wallengrenii</i>	Wit. G/town
<i>P. macmasterii?</i>	Wit. G/town
<i>Aloeides thyra</i>	Wit. Uit.

<i>A. pierus</i>	P.E. Uit. Wit.
<i>Capys alphaeus</i> (<i>Hairstreaks</i>)	Wit.
<i>Myrina ficedula</i>	Uit.
<i>Deudorix antalus</i>	Wit. Uit.
(Others)	
<i>Axioceres harpax</i>	G/town, Despatch, Wit.
<i>Leptomyrina hirundo</i>	G/town only
<i>L. lara</i>	Everywhere
<i>Lachnocnema bibulus</i>	Uit. G/town

NYMPHALIDAE

<i>Charaxes varanes</i>	Uit., Rocklands, V.S.P., G/town
<i>C. xiphares</i>	V.S.P., G/town, Hogsback
<i>C. ethalion</i>	G/town (Nature Res.)
<i>Precis cebrenae</i>	Everywhere
<i>P. archesia</i>	Uit., Hogsback, V.S.P.
<i>P. octavia</i>	Hogsback
<i>Eurytela hiarbas</i>	V.S.P.
<i>Neptis marpess</i>	V.S.P.
<i>Antanartia hippomene</i>	Hogsback
<i>Pyrameis cardui</i>	Everywhere
<i>Catacroptera cloanthae</i>	Wit., Despatch
<i>Hypolimnasia misippus</i>	Uit., Wit.

DANAIDAE

<i>Danaus chrysippus</i>	Everywhere
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ACRAEDIAE

<i>Acraea horta</i>	G/town
<i>A. neobule</i>	Hogsback, V.S.P.
<i>A. rahira</i>	Rocklands
<i>A. anacreon</i>	Hogsback
<i>Pardopsis punctatissima</i>	Wit., G/town

SATYRIDAE

<i>Aeropotes tulbaghia</i>	Wit., G/town
<i>Meneris dendrophilus dendrophilus</i>	Hogsback only
<i>Dira oxylus</i>	Hogsback
<i>Dira clytus</i>	Everywhere in season
<i>Stygionympha vigilans</i>	Wit., G/town
<i>Pseudonympha magus</i>	Wit., G/town
<i>Bicyclus safitza</i>	V.S.P., Uit.
<i>Cassionympha cassius</i>	V.S.P., Uit., G/town

HESPERIDAE

<i>Coeliades forestan</i>	Despatch
<i>Celaenorrhinus mokeezi</i>	Hogsback
<i>Tagiades flesus</i>	Uit. (Groendal)
<i>Calleagris kobela</i>	Hogsback
<i>Sarangesa phidyle</i>	Despatch
<i>Eagris nottoana</i>	Uit.
<i>Eretis djaelaetae</i>	Wit., Uit.

Borbo borbonica	G/town
Tsitana uitenhaga	Uit.
Metisella metis	Uit., Hogsback. P.E.
Kedestes lepenula	V.S.P., Despatch, G/town
Gomalia elma	Uit., G/town
Gegenes hottentota	Everywhere
Spialia spio	Rocklands
S. diomus	Everywhere

Total 95 species.

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Some aspects of the fauna of the Ingessana hills, Sudan, with an account of an experiment with light trapping

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The Ingessana hills lie south-west of Roseires between the Blue and White Niles in the *Acacia*-tall grass forest region of the Sudan (Andrews, 1948). Here the rolling grass plains south of Singa with 'heglig' (*Balanites aegyptiaca* Del.), 'aradeb' (*Tamarindus indica* Linn.), 'talh' (*Acacia Seyal*), 'sidr' (*Zizyphus spinachristi* Willd.), 'tebaldi' or baobab (*Adansonia digitata* Linn.), 'la'ot' (*Acacia orfota* (Forsk.) Schweinf.) and 'kitr' (*A. mellifera* Benth.) give way to rocky hills covered with grass and trees. Among the latter, *Sterculia tomentosa* G. & P., *Bauhinia* spp. and 'dom' palms (*Hyphaene thebaica* Mart.) are common whilst 'taraktarek' (*Boswellia papyrifera* Hochst.) and *Ficus* spp. occur on the rocky outcrops, and bamboo (*Oxytenanthera abyssinica* Munro) along the banks of seasonal water-courses.

During the December vacation, 1968, I decided to visit the Ingessana hills. In addition to investigating a region about which no faunistic information is available, I wanted to test the efficacy in the field of 6v. battery-operated suction mosquito light traps manufactured in U.S.A. and supplied to us by W.H.O.

Two of these traps were attached to the leeward side of the Land Rover at each camping site at a height of 1 m. The fans of each were run concurrently for two hours after sunset, but the light bulb of only one trap was connected, the other trap acting as control. The results obtained, with relevant climatic data, are given in Table I. This indicates clearly that significantly larger numbers of insects were attracted to the lighted trap than were sucked into the control, including *Culex* but not *Anopheles* mosquitoes.

As can be seen from the localities listed in Table 1, we travelled to Galegu in the Dinder National Park (Cloudsley-Thompson, J. L., 1963, *Entomologist's mon. Mag.*, 91: 65-7) and then returned to Guweisi and Es Suki, before driving down the Blue Nile to Roseires. The reason for this was that the roads had not been cleared beyond Galegu. The long grasses towered above the Land Rover and blanketed the radiator which had constantly to be cleared every time the engine boiled. Progress was